DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-002836 Address: 333 Burma Road **Date Inspected:** 21-May-2008

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1500 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: C.M. Chen **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component: OBG Deck Segments**

Summary of Items Observed:

The Quality Assurance (QA) Inspector, Mahlon Lindenmuth, arrived on site at the Zhenhua Port Machinery Company facility on Changxing island, China to periodically monitor welding and Quality Control functions. While on site the Quality Assurance Inspector observed and/or discovered the following:

QA Inspector, Lindenmuth, observed the work being performed in Bay 2 of the New OBG. ZPMC personnel were performing various functions related to the fabrication of the OBG Side Plates and Bottom Plates as well as the deck sections in the jig fixture. The fabrication performed includes but is not limited to the preparation of areas where temporary welds for strongbacks are located, bevel preparation and welding of the Complete Joint Penetration welds (CJP)on Side Plates and Bottom Plates, heat straightening of Side Plates and Bottom Plates

South Jig Fixture:

*Segment 3BE(SEG16)- ZPMC personnel are backgouging from the root side (bottom) of the Complete Joint Penetration

(CJP) weld joining 3BE-E7 to 3BE-D6. The backgouging is being performed in order to remove discontinuities located in the weld that have been discovered by Ultrasonic Testing (UT) performed by ZPMC QC personnel.

North Jig Fixture:

*Segment 3BW (SEG15)-Segments 3BW-E7,3BW-D6 and 3BW-C5 have been set into the jig fixture but have not been welded to the fixture.

Shop Welding:

WELDING INSPECTION REPORT

(Continued Page 2 of 2)

*Caltrans QA Lindenmuth observed ZPMC personnel performing welding on floor beam segment FL-2. The Complete Joint Penetration (CJP) weld is located at the diagonal connection plates to the bottom flange of the FL2 segment. The segment will be installed at Panel Point 25 and will be incorporated into Segment 3AW. The joint is identified as SSD14A-PP025-137. Welding essential variables have been noted and recorded below.

*Caltrans QA Lindenmuth observed the backgouging of the CJP weld joining side plates SP28 to SP20A. The backgouging is being performed in order to remove discontinuities located in the weld that have been discovered by Ultrasonic Testing (UT) performed by ZPMC QC personnel. The side plates are incorporated into SEG019A-002.

*Caltrans QA Lindenmuth observed ZPMC drilling bolt holes on SEG19A plates.

Iten	Weld Identification	Applicable WPS CWI Name	Amperage	Voltage	TravelSpeed	Preheat Temp	Remarks
1	SSD14A-PP025-137	WPS-B-T-2233-TC- LC4M FChen	216	26	115mmpm	35 C	

Summary of Conversations:

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Lindenmuth, Mahlon	Quality Assurance Inspector
Reviewed By:	Cuellar,Robert	QA Reviewer